

ABSTRACT

A light emitting device having a phosphor substrate, which comprises nitride containing at least one element selected from Group XIII (IUPAC 1989) having a general formula XN , wherein X is at least one element selected from B, Al, Ga and In, a general formula $HN:Y$, wherein X is at least one element selected from B, Al, Ga and In, and Y is at least one element selected from Be, Mg, Ca, Sr, Ba, Zn, Cd and Hg, or a general formula $HN:Y,Z$, wherein X is at least one element selected from B, Al, Ga and In, Y is at least one element selected from Be, Mg, Ca, Sr, Ba, Zn, Cd and Hg, and Z is at least one element selected from C, Si, Ge, Sn, Pb, O and S. The phosphor substrate is prepared by crystallization from supercritical ammonia-containing solution and the light emitting device is formed by a vapor phase growth on the phosphor substrate so as to obtain a light emitting device which has a wavelength distribution emitting a white light etc. and a good yield.